

Surveys of radio telescopes for modeling of gravitational deformation

The IVS Directing Board resolves that every radio telescope operating in IVS observing sessions be surveyed for gravitational deformation investigations. The reasons for this are that gravitational deformation effects have a severe impact on the results of the local vertical coordinate components and that every telescope has a different response to gravitation at different elevation angles. The measurements need to consist at least of the determinations of changing focal lengths with respect to elevation angle and of elevation-angle-dependent variations in the distance between the vertex of the main reflector and the sub-reflector or prime focus feed horn, respectively.